

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2

DATE: JUL 27 1998

SUBJECT: Onondaga Lake Site
Baseline Ecological Risk Assessment

FROM: Robert Witte, Life Scientist
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TO: Michael Clemetson, Coordinator
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I have reviewed the Baseline Ecological Risk Assessment (BERA) report for the Onondaga Lake Remedial Investigation and Feasibility Study (RI/FS) for issues relating to environmental resources, and offer the following comments:

- As illustrated in Table 3-3 and other places in the text, an attempt was made to use fish fillet data to give whole body levels of PCBs, other TAL and TCL chemicals, and methylmercury in several species of fish in Onondaga Lake. Unfortunately, the data on which these conversions (see Section 4.3.3) are based exhibit many values that were estimated or undetected (see Appendix D). Therefore, the degree of uncertainty that has been incorporated into these calculations renders the resulting whole body burden estimates very uncertain, to a degree that we should question their use.
- The wetlands shown in Figure 4-5, and discussed in Table 4-2, comprise only the New York State-regulated wetlands in the vicinity of Onondaga Lake. Unfortunately, this does not include any wetlands smaller than 5 hectares (12.4 acres). Executive Order 11990 (Protection of Wetlands) and the EPA's 1985 Policy on Wetlands and Floodplains Assessments for CERCLA Actions require that we delineate and assess impacts for all Federally-regulated wetlands, for which there is no such size limitation. Therefore, the report does not adequately describe or calculate the habitat use by the various receptor species. To attempt to perform an analysis of effects of contaminants on benthic biota, fish, birds, and mammals without utilizing information that will provide a realistic model in terms of feeding strategies and other habitat uses, is to decrease the value of that analysis and to cast doubt on the validity of any bioaccumulation factors that are developed to derive ecological risk numbers for the receptor species identified in the report. We suggest that EPA recommend to the New York State Department of Environmental Conservation that the Responsible Party needs to delineate the additional wetlands and reassess the impacts to the food-web.

- Table 4-20 presents exposure values for Great Blue Herons that seem to be based on the assumption that these herons would be feeding in Onondaga Lake, and that the "mean fish concentration" is an appropriate value for feeding. However, this does not provide the "conservative" value that EPA normally would advocate. Should not the higher range values be used as a "worst case" situation? In support of this assumption, it appears more likely to me that herons would be feeding in wetlands areas, where the substrate includes sediments with higher TOC and more fines than the lake shore. Since PCBs and metals would preferentially adsorb to such sediments, it should be ascertained what the COC levels are in these sediments that fish and shellfish would be ingesting and inhabiting. If fish body burdens in these areas are higher than in the open lake, the values for the heron will need to be recalculated.

In addition to these comments, I am in agreement with the comments and opinions expressed at the July 23 BTAG meeting. If there are any questions regarding these comments, please contact me at x3750.

cc: A. Hess, 2ERRD-SP/CT